

EXHIBIT C

Original Transcript

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

IAN J. BROWN, JAMES BROWN AND
BARBARA BROWN,

Plaintiffs,

VS

CIVIL ACTION NUMBER
04-11924-RGS

UNITED STATES OF AMERICA,
VERIZON NEW ENGLAND, INC.,
AND BOSTON EDISON COMPANY
D/B/A NSTAR ELECTRIC,

Defendants.

DEPOSITION OF

MURRAY BURNSTINE, P.E.

February 20, 2007
10:50 a.m.

Prince, Lobel, Glovsky & Tye, LLP
100 Cambridge Street
Boston, Massachusetts

Laurie J. Driggers, Certified Court Reporter, Registered Professional Reporter,
Certified Realtime Reporter, Certified LiveNote Reporter and Notary Public
within and for the Commonwealth of Massachusetts.



Technologies you can use • Experience you can Trust

100 Franklin Street, Boston, Massachusetts 02110

Phone: 617.557.0039 • Toll Free: 866.814.0039 • Toll Free Fax: 866.557.0041

www.jackdanielreporting.com

1 they don't work for me.

2 Q. Okay.

3 (Off the record)

4 BY MR. LEWIN:

5 Q. Do you have any secretarial help --

6 A. No.

7 Q. -- in your office?

8 And what's the nature of the work
9 that you do?

10 A. I do consulting in -- in the field
11 of accident reconstruction, automotive
12 design, that type of thing.

13 Q. Now -- sorry, were you finished?

14 A. What? Yes.

15 Q. And were those two separate areas,
16 accident reconstruction and automotive
17 design? Or was that one description,
18 accident reconstruction/automotive design?

19 A. Well, sometime what's involved is
20 just accident reconstruction. Other times
21 it's the design of the particular vehicle
22 -- you know, an automobile, motorcycle,
23 bicycle. In other words, I don't do
24 ladder cases or slip and falls unless it



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 involves some kind of wheeled vehicle.

2 Q. Can you explain to me what accident
3 reconstruction is?

4 A. Well, it's a -- a measurement of
5 the scene, an application of the laws of
6 physics for bodies in motion, some
7 surveying. And it usually involves the
8 drawing of a bird's eye view of the scene,
9 that type of thing, a scale drawing.
10 That's about it.

11 It's more or less working
12 backwards. You come after an accident and
13 you try and apply the laws of physics to
14 find out what happened.

15 Q. When you say "what happened," do
16 you have a specific focus in the area of
17 accident reconstruction?

18 A. Well, sometimes it's who was on
19 what side of the street, how fast were
20 they going, what were the sight distances,
21 were there defects in the road that caused
22 the accident, was there a defect in the
23 vehicle that caused the accident?

24 A lot of my work involves



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 investigation of crash-induced fires, you
2 know, how did the fire start? Is it due
3 to some defect? Or was it carrying a can
4 of gas on, you know, in the back seat,
5 that type of thing? Was it an electrical
6 fire?

7 Some of my investigations involve
8 airbags that just go off when they start
9 the car up, that type of thing. You
10 know, finding out what -- what caused
11 that.

12 That's about it. I mean, years
13 ago, most of my work had to do with
14 automotive design, vehicle defects. But
15 they've improved the automobiles quite a
16 bit, so there's more accident
17 reconstruction now than it was in the
18 past.

19 Q. Mr. Burnstine, I'm going to show
20 you what's been marked as Exhibit 2. I'll
21 represent that this package of documents
22 was produced along with your report in
23 this case. I'd just ask you to flip
24 through it and tell me if you recognize



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. Well, from 1960 to about 1963 it
2 was all criminal work, accident
3 reconstruction, because I was working for
4 the Commonwealth then. So it would be all
5 criminal cases.

6 I -- that's when I worked at the
7 Harvard Medical School. After that, I
8 went to work at MIT, and I was a -- being
9 contacted by insurance companies and
10 district attorneys to continue the work of
11 the Harvard Study. And I checked with
12 MIT. They said I could do whatever I
13 wanted one day a week without getting in
14 trouble; in other words, use the office
15 and all that at MIT.

16 So I -- so I start consulting for
17 insurance companies, plaintiffs' attorneys,
18 police departments. But now it was as a
19 consultant, not as an employee of the
20 State. So I'd say from about 1964 on I
21 -- I was more or less on my own doing the
22 consulting.

23 Q. So from 1964 on, is it fair to say
24 that 90 percent of your work concerned



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 auto manufacturing defects?

2 A. That's what I was retained for. It
3 didn't always turn out that way. But in
4 every case, there was usually an accident
5 reconstruction that had to be done.

6 Q. In a case against the -- in cases
7 against the auto manufacturers, did the
8 accident reconstruction focus on the
9 mechanism of injury that was alleged to
10 have been caused by an auto manufacturing
11 defect?

12 A. Sometimes. But you still had to --
13 I still had to do an accident
14 reconstruction. For instance, if you have
15 a brake failure and the car's going
16 uphill, it doesn't matter. It's going to
17 stop anyway. So, I mean, there always has
18 to be an inspection of the scene.

19 Some of the claims involved
20 crashworthiness; in other words, the --
21 the accident may have not been the
22 manufacturer's fault, but the injuries were
23 enhanced because of a crash-induced fire
24 or lack of padding or vehicles didn't have



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 seat belts in those days.

2 Some manufacturers advertised, you
3 know, for \$20 we'll install seat belts.
4 Give your loved ones the gift of life, you
5 know. And the lawyer would say he
6 should've had it -- and, you know, it
7 would've cost him a dollar to put it in
8 the car. So, you know, a lot of the
9 cases involved that.

10 Q. And in those cases, in what
11 capacity did you serve as an expert? Was
12 it to evaluate the crashworthiness of the
13 vehicle?

14 A. Right. I have a degree in
15 biomechanics, so I was able to testify
16 that, for instance, if the back of the
17 front seat was padded, then the person
18 whose head hit it, you know, wouldn't have
19 suffered whatever they suffered. Or was
20 it a violation of a federal standard that
21 said the back of the seat had to be
22 padded, that type of thing?

23 Q. Mr. Burnstine, I'm going to show
24 you what's been marked as Exhibit Number 1



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 for today's deposition. Do you recognize
2 this document?

3 (Witness viewing)

4 A. Yeah. Except I was told over the
5 phone to change the date and the time.

6 Q. Okay.

7 A. In other words, the February 16th
8 is no good. It became February 20th, and
9 the 2:00 became 10:45.

10 Q. Okay. Do you see that you've been
11 requested to bring certain documents with
12 you today?

13 (Witness viewing)

14 A. Right.

15 Q. Okay. And did you make an effort
16 to bring the requested documents with you?

17 A. Yes.

18 Q. Okay. Did you bring your most
19 recent CV with you today?

20 A. Yes.

21 Q. And is that CV any different from
22 the CV that's been produced to us already
23 in this case?

24 A. No. The type looks different,



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 see that somebody was going to get their
2 foot chopped off, so...

3 But I, you know, I'd consider that
4 an accident reconstruction, trying to find
5 out what happened, but the truck wasn't
6 even moving when this happened.

7 Q. What percentage of your business
8 today is comprised by consulting and
9 litigation matters?

10 A. Well, most -- all of the business.
11 There's a potential for -- for either
12 litigation or somebody going to jail --
13 that type of thing.

14 Q. And has that been the case since
15 1964, that all of your consulting work has
16 been related to litigation of one sort or
17 another?

18 A. Yes. Some of it was -- involved
19 class actions. The Commonwealth of
20 Massachusetts had a -- a Consumer
21 Protection Bureau -- I don't know if they
22 still have it -- run by Paula Gold. And
23 there were some of those investigations
24 that led to the people that bought a



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 certain vehicle getting all their money
2 back, you know, and the company taking the
3 cars back.

4 And another case involved the
5 banning of a certain vehicle in
6 Massachusetts. They couldn't sell it here
7 because of deceptive advertising.

8 And I did some work -- there was a
9 Massachusetts organization, Insurance Fraud
10 Bureau, something like that. They would
11 use me to investigate phony accident
12 claims -- that type of thing.

13 Q. Have you brought your entire file
14 with you regarding the Brown case?

15 A. Yes.

16 Q. Okay. Are there any documents
17 about the Brown case that you did not
18 bring with you today?

19 A. I don't think so. Well, I -- I
20 have a list -- just to save weight, I
21 left a lot of depositions behind. I
22 couldn't carry them all. But --

23 Q. Which depositions --

24 A. -- that's all I left behind.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 your file after the -- you received the
2 notice of deposition in this case?

3 A. Oh, no.

4 Q. Were there any other articles that
5 were not cited in your report that you
6 relied on or considered in the course of
7 preparing the report?

8 A. Well, I don't remember what I
9 cited, but here's one by the Federal
10 Highway Administration: " Design
11 Considerations For Existing Utility Poles
12 In Urban Areas." I don't -- I don't
13 remember if I cited that or not.

14 Q. Is this something that you
15 considered when preparing your report in
16 this case?

17 A. No. My report, I'd say, is mostly
18 common sense. But, you know, lawyers like
19 to see something in writing to back you
20 up.

21 Q. So you did not rely on this report?
22 This is just something you got to satisfy
23 Attorney Charnas --

24 A. I mean --



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 I just wouldn't rely on them.

2 Q. Did you have -- did you maintain
3 files on your computer with regard to this
4 case?

5 A. Some.

6 Q. Okay.

7 A. There is a file that says, Charnas
8 Brown file.

9 Q. And did you print out and bring
10 with you today the contents of that file?

11 A. Yes.

12 Q. All of them?

13 A. Yes. Well, included in there would
14 be, you know, my bill --

15 Q. Okay.

16 A. -- the report, the pretrial report.

17 Q. Okay. If we could look at Exhibit
18 Number 2. If I could have you turn to
19 your resume.

20 (Witness complying)

21 Q. Am I correct that you have a degree
22 in mechanical engineering?

23 A. Yes.

24 Q. And where did you receive that



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 degree?

2 A. When or where?

3 Q. Where?

4 A. Wayne State University, Detroit,
5 Michigan.

6 Q. Okay.

7 A. It's -- mechanical engineering with
8 a specialty in automotive engineering.

9 Q. Okay. Do you have a degree in
10 civil engineering?

11 A. No.

12 Q. Have you taken courses in civil
13 engineering?

14 A. Yes.

15 Q. What courses have you taken?

16 A. Surveying.

17 Q. Is that it?

18 A. Yup.

19 Q. Okay. And when did you take that
20 course and where?

21 A. Sometime between 1947 and 1952. It
22 was an undergraduate course. Had to
23 survey a park on the outskirts of Detroit,
24 Michigan.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Have you taken any courses in
2 highway design?

3 A. No.

4 Q. Have you taken any courses in
5 roadside design?

6 A. No.

7 Q. Have you taken any courses in
8 roadway design?

9 A. What?

10 Q. Roadway design?

11 A. No.

12 Q. Have you attended any seminars
13 regarding highway design, roadside design
14 or roadway design?

15 A. Well, I've been at seminars where
16 the group from the Harvard Study would
17 have a presentation. And one of my
18 co-workers was Murray Segal, a highway
19 designer. So I would hear his
20 presentation -- you know, the role of the
21 highway in causing accidents, that type of
22 thing.

23 Q. How many times have you seen Murray
24 Segal's presentation?



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. Well, we worked -- you know, we
2 worked side by side. So for, I think,
3 three years.

4 Q. When was that?

5 A. I'm trying to think. It would be
6 1960 to 1963.

7 Q. Do you recall the topic of his --
8 of the presentation you saw him give?

9 A. Well, I have listed on Page 5 of
10 my resume: lectures at professional
11 meetings. That would be where those
12 topics came up. I would -- I would give
13 my lecture, and Murray Segal would give
14 his.

15 Q. And my question to you is: what was
16 the subject matter of Murray Segal's
17 lecture that you saw him give?

18 A. Highway design. That was his -- he
19 covered the environmental factors and the
20 roadside design factors, what -- their
21 contribution to fatal accidents, that type
22 of thing.

23 Q. And this was in 1960 to '63?

24 A. Correct.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. And do you recall, specifically,
2 the content of his lecture?

3 A. Well, one lecture had to do with a
4 -- an instrument that we jointly
5 developed. For instance, if you had to
6 make a measurement on the Southeast
7 Expressway, you know, you wouldn't want to
8 spend much time standing there setting up
9 a tangent and that, so we had a lot of
10 equipment that we could just run out and
11 snap it into the street and get out of
12 the traffic, that type of thing.

13 So that would be -- that was one
14 of the lectures. And I think there is a
15 paper -- yes. There was a paper written
16 on that with Murray Segal, Item 6:
17 "Transverse Pavement Slope Measuring
18 Device," with Murray Segal, Harvard Medical
19 School.

20 Q. Where is that?

21 A. Page 4 lists the publications.

22 Q. Okay.

23 A. And Publication Number 6.

24 Q. So the lectures you heard Murray



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Segal give concerned the transverse
2 pavement slope measuring device?

3 A. No, we worked on that together.

4 Q. Okay.

5 A. And then we presented that
6 together.

7 Q. Did the lectures you heard Murray
8 Segal give, were -- were those concerning
9 the role of a highway in connection with
10 fatal accidents?

11 A. Well, it could be a highway or an
12 alley.

13 Here's the way this Harvard group
14 worked -- it was multi-disciplined. So I
15 would present the engineering and the
16 biomechanics aspect. Murray Segal would
17 cover the environment and the highway
18 design. We had a social worker that would
19 tell what kind of people they were. We
20 had psychologists, psychiatrists,
21 optometrists.

22 It was a multi-disciplined approach
23 to everything that went into a fatal
24 accident. We had a pathologist -- had to



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 have an autopsy in every investigation.

2 But we would all sit around the table and
3 do our presentations, so...

4 Q. Okay. And -- in that Harvard
5 group, Murray Segal was the highway design
6 expert, right?

7 A. Correct.

8 Q. You weren't the highway design
9 expert?

10 A. No.

11 Q. Okay. Have you taken any courses
12 in accident reconstruction?

13 A. No. Just -- I took courses in
14 physics. Physics, dynamics, fluid
15 mechanics -- they're all the basis of
16 accident reconstruction.

17 Q. Okay. But you haven't given --
18 taken any courses given by any institution
19 on how to conduct an accident
20 reconstruction?

21 A. No.

22 Q. Okay. How about, attended any
23 seminars about how to conduct an accident
24 reconstruction?



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. Well, there's a lot of accident
2 reconstruction groups. I don't know what
3 that actual one is.

4 Q. Okay. How about A-A-S-H-T-O?

5 A. I think that's the Highway Designer
6 Society.

7 Q. How about the A-S-C-E?

8 A. It would be the Civil Engineer
9 Society.

10 Q. Okay. Have you ever taken any
11 courses from what I refer to as AASHTO,
12 A-A-S-H-T-O, regarding roadside design?

13 A. No.

14 Q. Have you ever taken any courses in
15 the Green Book -- first of all, do you
16 know what the Green Book is?

17 A. Yes.

18 Q. Okay. What is the Green Book?

19 A. I believe that it covers the
20 Federal Standards For Highway Design.

21 Q. Do you believe there to be a
22 Federal Standard For Highway Design?

23 A. What's that?

24 Q. Do you believe there to be a



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Federal Standard For Highway Design?

2 A. Well, I -- as I recall, it was --
3 the whole system was set up to move -- so
4 they could move an Army across the
5 country. So they needed standards as to,
6 you know, the width of their trucks and
7 the atomic cannon and -- they didn't want
8 to get stuck making a turn.

9 So that's where the standards came
10 from. They wanted minimum standards so
11 they could move the Army from east to
12 west.

13 Q. And is it your understanding that
14 those are the standards that are still in
15 effect today?

16 A. Yeah, I think so.

17 Q. Okay. Do you know who promulgates
18 the standards to which you're referring?

19 A. I think it's that A-A-H-S-T-O,
20 whatever it is. It's the Association of
21 State and Federal Highway Designers.

22 Q. Okay. Do you know if those
23 standards apply to urban roads?

24 A. I don't know. You're asking me a



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 legal question.

2 Q. Are you familiar with the Yellow
3 Book?

4 A. Not by that name.

5 Q. Okay. Have you taken any courses
6 in -- that are given with respect to
7 publications by AASHTO?

8 A. I don't know what you mean.

9 Q. Have you ever taken or attended a
10 seminar where the topic of the seminar was
11 an AASHTO publication?

12 A. No.

13 Q. Have you ever taken a course from
14 the Federal Highway Administration
15 regarding roadway or roadside design?

16 A. No.

17 Q. Do you have any training from any
18 state department of transportation with
19 respect to roadside or roadway design?

20 A. No.

21 Q. Are you familiar with the -- any
22 law or regulation in Massachusetts that
23 deals with roadside design?

24 A. No.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Are you familiar with any law or
2 regulation in Massachusetts that deals with
3 placement of utility poles?

4 A. No.

5 Q. You're not a licensed civil
6 engineer, are you?

7 A. No.

8 Q. Are you an accredited traffic
9 accident reconstructionist?

10 A. Well, I've been -- I've been
11 testifying for the last 40 years, but I
12 don't -- I don't have a -- a diploma that
13 says I'm accredited.

14 Q. Okay. Are you licensed in any
15 state to be an accident reconstructionist
16 by any licensing authority?

17 A. No. I'm a licensed professional
18 engineer in two states, but -- in
19 engineering.

20 Q. And that's as a mechanical
21 engineer?

22 A. Yes.

23 Q. Okay. Are you licensed or
24 accredited by any organization in roadside



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 design?

2 A. No.

3 Q. Okay. On your resume, Page 6,
4 your CV, you list four societies in which
5 you are a member. Is that up-to-date?

6 A. Yes.

7 Q. You're not a member of any other
8 professional societies at this time?

9 A. No.

10 Q. Have you ever been a member of any
11 other professional societies?

12 A. Yeah. I was a member of the
13 Bulletin of Atomic Scientists. And I
14 didn't like their politics, so I quit.

15 Q. Have you ever been a member of the
16 Transportation Research Board?

17 A. No.

18 Q. How about the Task Force for --
19 Task Force for Roadside Safety of AASHTO?

20 A. No.

21 Q. How about Task Force 13 of AASHTO?

22 A. What is that last one?

23 Q. Task Force 13?

24 A. No.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Have you ever heard of Task Force
2 13?

3 A. No.

4 Q. Have you ever heard of the Task
5 Force for Roadside Safety of AASHTO?

6 A. No.

7 Q. Ever been a member of the American
8 Trafety -- Traffic Safety Services
9 Association?

10 A. No.

11 Q. Have you ever been a member of the
12 International Association of Accident
13 Reconstruction Specialists?

14 A. No.

15 Q. How about the National Association
16 of Professional Accident Reconstruction
17 Specialists?

18 A. No.

19 Q. How about the Society of Accident
20 Reconstructionists?

21 A. No.

22 Q. Have you ever been a member of any
23 professional organization that concerns
24 itself with accident reconstruction?



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. I guess the Society of Automotive
2 Engineers.

3 Q. Okay. And have you been a member
4 of any of the groups within the Society of
5 Automotive Engineers that specifically
6 concerns itself with accident
7 reconstruction?

8 A. No. I bought their -- I bought
9 their publications.

10 Q. About --

11 A. Papers, that type of thing.

12 Q. About accident reconstruction?

13 A. Yes.

14 Q. Are you a member of the Accident
15 Reconstruction Network?

16 A. No.

17 Q. Have you ever served as a
18 consultant regarding utility pole design?

19 A. I've done accident investigations
20 where a utility pole was either struck, or
21 the wires were struck, and the pole came
22 down on top of a car, or a transformer
23 fell down on top of a car -- that type of
24 thing.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Have you ever provided consulting
2 services to a utility company regarding
3 the design of a line of utility poles?

4 A. No. I've -- I've been retained by
5 utility companies, but not for pole
6 design.

7 Q. Do you have any training in the
8 design of utility poles?

9 A. Just whatever applies in, you know,
10 physics, chemistry.

11 Q. Well, have you ever taken any
12 courses, specifically, with respect to the
13 design of utility poles?

14 A. I think there were some
15 undergraduate courses that had to do with
16 power transmission, different types of
17 poles, that type of thing. Just -- as an
18 undergraduate, you get a smattering of
19 electrical engineering and chemical
20 engineering.

21 Q. Well, my question's more specific.
22 Have you ever taken any courses
23 with respect to utility pole placement?

24 A. No.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. Yes.

2 Q. Now do you have an opinion about
3 the position of Brown's body and the
4 movement of Brown's body from the time he
5 hit the utility pole to the time his body
6 came to rest on the pavement?

7 A. It's not an independent opinion.
8 He apparently flew through the air for
9 nine feet, where -- wherever the police
10 say he landed.

11 Q. But you don't have an opinion
12 independent of what's --

13 A. No.

14 Q. -- depicted in the police report?

15 Do you have an opinion as to
16 whether the speed of the motor -- excuse
17 me -- the speed of the motorcycle changed
18 when Brown's head hit the utility pole?

19 A. There are two factors coming into
20 play. One is the friction of Brown's body
21 against the motorcycle would tend to slow
22 it down, and, at the same time, the weight
23 of Brown's body is gone. So the
24 motorcycle might speed up when the rider



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. That I don't know.

2 Q. What's the basis of your opinion
3 that the top of Mr. Brown's helmet made
4 contact with the utility pole?

5 A. I think there's brown smudges.
6 I'll have to look at my photographs, but I
7 think there are brown smudges on the top
8 of the helmet. And these -- these were
9 compared to the wood samples I took from
10 the pole. Saying they were similar is a
11 representation I got.

12 Q. It's your opinion that -- it's your
13 opinion that the pole is on the wrong side
14 of the road?

15 A. Yes.

16 Q. Okay. What is the basis for that
17 opinion?

18 A. It's common knowledge that the
19 safest side of the road that's curved for
20 poles is the inside of the curve because
21 when cars get in trouble on ice or they
22 start skidding for any reason, the laws of
23 physics will carry them to the outside of
24 the curve. So it's a bad location for



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 poles.

2 Q. Did you consult any person
3 regarding the proper location of utility
4 poles in the course of preparing your
5 opinion in this case?

6 A. No. It's in that literature that
7 -- that was cited. I believe one of
8 those papers says the safest place for
9 utility poles is on the inside of the
10 curve.

11 Q. And does that paper say that the
12 outside of a curve is the wrong place for
13 a utility pole?

14 A. It says there's a history -- an
15 accident history of -- of vehicles hitting
16 poles that are on the outside of the curve
17 -- outside of the curve.

18 Now it also says the safest way is
19 to bury the utilities, but you can't do
20 that all the time. Get rid of the poles.

21 Q. Well, does that report say that
22 poles cannot be located on the outside of
23 a curve?

24 A. It's not a standard. I mean, it



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

163

1 would be -- it would be good practice. I
2 don't know which of those papers it was.

3 Q. All right. Well, let me ask you
4 some questions.

5 A. That's not something I made up out
6 of the blue, you know, that --

7 Q. Did you -- did you --

8 A. For the last 40 years I've been
9 hearing that the pole's on the wrong side
10 of the curve.

11 Q. All right. Am I correct that the
12 paper you're referring to is -- is "Design
13 Considerations For Existing Utility Poles
14 in Urban Areas?"

15 A. Yes.

16 Q. Okay. And is it your -- did you
17 have that article before this case?

18 A. I don't know. I don't think so.

19 Q. All right. Had you ever reviewed
20 it before this case?

21 A. No. I think I went looking for
22 papers that -- that had to do with
23 roadside design.

24 Q. You went looking for papers to



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 support your opinion that it was on the
2 wrong side of the road?

3 A. Yeah, that's right.

4 Q. Do you consider the source of that
5 paper to be reputable?

6 A. I think it was the National Highway
7 Transportation Authority. I think it was
8 the -- the United States government if it
9 was N-H-T-S-A.

10 MR. CHARNAS: Is that a no?

11 A. Huh? Where's my report?

12 Q. Mr. Burnstine, did you read that
13 entire article --

14 A. Yes.

15 Q. -- before reaching your opinion?

16 A. Yes.

17 Q. Okay. And did you consider its
18 methodology and conclusions to be sound?

19 A. Yes.

20 Q. Did you review any other articles
21 to support your conclusion that the pole
22 was on the wrong side of the road?

23 A. No. I just have to say, it's more
24 or less common knowledge, you know, to



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 people in my field that the safest
2 location for a pole, if you got to have
3 them, is on the inside of a curve.

4 Q. Understanding that it would be
5 safer to have the pole, in your opinion,
6 on the inside of the curve, what is the
7 basis of your opinion that the pole was
8 located on the wrong side of the road?

9 A. Because it's on the outside of the
10 curve.

11 Q. So is it your opinion that all
12 utility poles must be located on the
13 inside of a curve?

14 A. No. They can be on the outside of
15 the curve if they're 20 feet from the
16 road, you know, where nobody's going to
17 hit them. But this thing's on the wrong
18 side of the road and it's nine inches from
19 the edge of the road.

20 Q. Well, when you -- when you -- I
21 think your report says the pole's 13
22 inches from the side of the road.

23 A. It's what?

24 Q. Thirteen inches?



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. Oh -- you're correct.

2 Q. When you say, wrong side of the
3 road, are you aware of any literature that
4 states poles cannot be located within 13
5 inches on the outside of a curve?

6 A. Just a rule of common sense.

7 MR. CALLAHAN: Is that a
8 no?

9 A. Pardon?

10 MR. CALLAHAN: Is that a
11 yes or a no? Can we get an answer to the
12 question?

13 A. I don't know of any written
14 standard that tells you 13 inches is no
15 good, but 14 inches is all right.

16 Q. Are you aware of any Massachusetts
17 regulations in that respect?

18 A. No. I'm not -- I don't know
19 either way.

20 Q. In fact, are you aware whether this
21 pole, in terms of its distance from the
22 edge of the pavement, was in violation of
23 any law or regulation in the State of
24 Massachusetts?



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

167

1 A. I don't know either way.

2 Q. What's the speed limit on that
3 curve?

4 A. The sign says, 25.

5 MR. CHARNAS: Off the
6 record.

7 (Off the record)

8 BY MR. LEWIN:

9 Q. Other than your reference to common
10 knowledge, as you've stated it, did you
11 review any other materials indicating or
12 supporting your opinion that the pole was
13 on the wrong side of the road, other than
14 the article entitled "Design
15 Considerations....," that we've been
16 speaking about?

17 A. I don't know either way.

18 Q. My question is, did you review any
19 other materials?

20 A. I don't remember.

21 Q. But you've brought here today all
22 the articles you reviewed in reaching your
23 opinion; isn't that right?

24 A. For this case, correct.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Are you aware of any publication
2 that states that it is impermissible to
3 locate a utility pole on the outside of a
4 curve of a road which has a speed limit
5 of 25 miles an hour?

6 A. I can't imagine that kind of --
7 that kind of specification.

8 Q. So is your answer no?

9 A. I'm not aware of any.

10 Q. Did you conduct any other analysis
11 upon which you based your opinion that the
12 pole was on the wrong side of the road,
13 other than reference to common sense -- or
14 common knowledge? I'm sorry.

15 A. No. Well, I talked to a traffic
16 engineer about it.

17 Q. Well, I just asked you a minute ago
18 if you had spoken to any person about the
19 location of the utility pole --

20 A. Oh, I --

21 Q. -- and you said, no.

22 A. -- I discussed this case with a
23 friend of mine who's a -- a highway
24 designer.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Who's that?

2 A. Murray Segal, S-E-G-A-L.

3 Q. And what was your discussion with
4 him?

5 A. I just explained it, told him about
6 the case: pole 13 inches from the end of
7 the pavement and on the wrong side of a
8 guardrail. And he said it sounded like a
9 real defect.

10 Q. What sounded like a real defect?

11 A. What's that?

12 Q. What sounded like a real defect?

13 A. The pole location and the guardrail
14 orientation.

15 Q. So he said that the location of the
16 guardrail behind the pole sounded like a
17 real defect?

18 A. Correct.

19 Q. Did he specifically say to you that
20 the location of the pole on the outside of
21 a curve was a defect?

22 A. I don't think he said it was a
23 defect. He said it sounds like a
24 dangerous scene.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Did he specifically say to you that
2 the pole was improperly located on the
3 outside of the curve?

4 A. I don't think so. I mean, there's
5 just some things, you know, like, one and
6 one is two. You don't have to get an
7 answer out of somebody.

8 Q. Did you tell him the speed limit of
9 the road?

10 A. I don't remember.

11 Q. Did you tell him the radius of the
12 curve --

13 A. Yes.

14 Q. -- on the road?

15 A. Yes.

16 Q. Now you also opine in your report
17 that the guardrail is on the wrong side of
18 the pole; is that -- is that your opinion?

19 A. Yes.

20 Q. What's the basis for that opinion?

21 A. The purpose of the guardrail is to
22 deflect vehicles away -- away from the
23 pole, not into it.

24 Q. How do you know that the purpose of



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

171

1 this guardrail was to deflect vehicles
2 away from the pole?

3 A. Well, that should've been its
4 purpose.

5 Q. What if the guardrail was installed
6 to protect the fence, would that change
7 your opinion about the purpose of the
8 guardrail?

9 A. Well, it could -- it should've been
10 on the other side of the pole.

11 Q. Do you know when the guardrail was
12 placed?

13 A. I was told that there -- there's no
14 record of who installed the guardrail is
15 what Mr. Charnas told me.

16 Q. Do you know when it was installed?

17 A. No..

18 Q. Do you know when the pole was
19 originally installed?

20 A. Yeah. 1916.

21 Q. Do you know which was installed
22 first?

23 A. What?

24 Q. Do you know which was installed



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 first?

2 A. Oh, I think the -- the pole would
3 be installed first. Because that type of
4 guardrail has only been around for 40
5 years.

6 Q. What materials did you review in
7 reaching your opinion that the guardrail
8 is on the wrong side of the pole?

9 A. Again, one of those papers.

10 Q. And just to speed things along, is
11 it this paper, "Effects of Presence of
12 Light Poles on Vehicle Impact of Roadside
13 Barriers?"

14 MR. CHARNAS: What page are
15 you on, Josh?

16 MR. LEWIN: Page 4 of
17 his --

18 (Witness viewing)

19 A. It might have been. I'm not sure.
20 It could've been the U.S. Federal Highway
21 paper.

22 Q. Did you review any other materials,
23 other than those listed in this report,
24 with respect to your opinion regarding the



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 relative locations of the guardrail and
2 the utility pole?

3 A. No.

4 Q. And, again, this article, "Effects
5 of Presence of Light Poles on Vehicle
6 Impact of Roadside Barriers," was that
7 something you already had in your files?
8 Or did you obtain that to find support for
9 your opinion?

10 A. I -- I -- I obtained it.

11 Q. To support your opinion in this
12 case?

13 A. I guess so.

14 Q. And where did you get it?

15 A. Internet search engine.

16 Q. And did you read this entire
17 article prior to reaching your conclusions,
18 or did you read it after you had reached
19 your conclusions?

20 A. Prior.

21 Q. And did you consider its
22 methodology and conclusions to be sound?

23 A. Yes.

24 Q. And how is it that you say this

1 article supports your conclusion that the
2 guardrail's on the wrong side of the pole?

3 A. I believe the article says the
4 purpose of the guardrail is to deflect
5 vehicles away from poles or other
6 obstacles.

7 Q. Do you consider Hartwell Road, in
8 the area of the accident, to be a
9 low-volume road?

10 A. Well, compared to what? It's not
11 -- it's not Route 128.

12 Q. It's a small, rural road; is that
13 right?

14 A. Yeah.

15 Q. With one lane in each direction?

16 A. Yeah, I mean, they have -- when
17 they have a traffic jam in the morning
18 when that -- people in the trailer park go
19 to work. You know, but I wouldn't
20 consider it a major road. It is just a
21 country road.

22 Q. It's not an urban road?

23 A. No.

24 Q. It's not a highway?



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 A. No.

2 Q. Are you aware of any state laws or
3 regulations with respect to the placement
4 of guardrails in juxtaposition to a
5 utility pole?

6 A. I -- I don't know of any written
7 regulation, but, again, it's just common
8 sense.

9 Q. And are you aware of whether that
10 matter of common sense is published in any
11 peer-reviewed journals or articles?

12 A. I believe these articles that I've
13 cited say that, what the purpose of the
14 guardrail is. It's not to make sure you
15 slide into a pole.

16 Q. Now you have also provided an
17 opinion in your report that Pole 37 was
18 too close to the pavement; is that your
19 opinion?

20 A. Correct.

21 Q. On Hartwell Road, what distance
22 would not be too close to the pavement?

23 A. Well, I just have to say, as far
24 as possible.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. Did you consult with anyone
2 regarding the proximity of the pole to the
3 edge of the pavement in reaching your
4 opinion?

5 A. I don't recall.

6 Q. What materials did you review with
7 respect to your opinion that the pole was
8 too close to the edge of the roadway?

9 A. Just my common sense.

10 Q. And again, you didn't review any
11 state rules or regulations or laws
12 regarding the distance that is required to
13 be maintained between the edge of the
14 pavement and the utility pole, did you?

15 A. Well, during the Harvard Study
16 there were -- we found a big oak tree in
17 Danvers that had been involved in about
18 ten fatal accidents of cars running into
19 it. It was -- it was half in the street,
20 this tree.

21 And we put a recommendation that
22 the tree be removed. And we had to go to
23 a hearing with the tree warden in front of
24 the tree so that the tree could hear what



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 was going on. It was like a trial before
2 they cut that tree down.

3 So it's very -- I've seen a lot of
4 trees that are, you know, growing out of
5 the road. So I don't think there is a --
6 a written standard about poles or trees in
7 the road. You have to take each one
8 individually.

9 Q. Are you aware of whether there have
10 been any other accidents with this
11 particular utility pole?

12 A. I'm not aware of either way.

13 Q. And this particular utility pole
14 wasn't out in the middle of the road, was
15 it?

16 A. No.

17 Q. It was off the edge of the road.

18 A. Thirteen inches off the edge.

19 Q. Okay. Are you aware of any
20 industry standards with respect to the
21 distance that must be maintained between a
22 utility pole and the edge of the pavement?

23 A. No. I'm sure they say, as great
24 as possible.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Q. But you're not aware of any?

2 A. No. I think in -- in Australia
3 and the British Isles they have what they
4 call a, I don't know, a 20-foot clear
5 zone. They don't allow any poles or
6 anything that you could hit within 20 feet
7 from the side of the road.

8 Q. And do they have that in
9 Massachusetts with respect to a rural
10 road --

11 A. No.

12 Q. -- with a speed limit of 25 miles
13 an hour?

14 A. No.

15 Q. Are you aware of any standards
16 published by any organization regarding the
17 distance from the pavement that utility
18 poles must be maintained at?

19 A. I'm not aware of any, but I'm sure
20 it says, as far as possible from the edge
21 of the road.

22 Q. Have you ever seen that standard
23 that you're sure is published somewhere?

24 A. I think it's in the NHTSA Roadside



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 Recommendations.

2 Q. Okay. Do you know whether the
3 utility companies were permitted to locate
4 the utility pole on the opposite side of
5 the road?

6 A. I don't know either way.

7 Q. In your report, you say that the
8 road surface was well-worn blacktop and
9 the coefficient of friction was assessed
10 at .6?

11 A. Right.

12 Q. How did you assess the coefficient
13 of friction of the blacktop?

14 A. Just by looking at it and
15 experience. I've run tests in the past
16 and a worn-out Massachusetts road has a
17 coefficient against rubber tires of .6, is
18 what we use everyday, .6 dry and .3 wet.

19 Q. And is that published anywhere?

20 A. Well, there are tables of
21 coefficients of friction. They'll give
22 you a range. Like, a brand new road is
23 worse than that. And then after about a
24 year, it reaches its peak of about .7.



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 leaning at that point.

2 Q. So it's your -- I'm sorry. I
3 didn't mean to cut you off.

4 A. There's no need for it to lean
5 there. He's just traveling, you know,
6 with the handlebars straight ahead. He's
7 going parallel to the -- to the guardrail.

8 Q. Okay. So it's your opinion that
9 Mr. Brown was astride the motorcycle
10 riding parallel to the guardrail along the
11 dirt shoulder of the road in an upright
12 position on the motorcycle; is that
13 correct?

14 A. Correct.

15 Q. And for how long a distance is it
16 -- is it -- strike that.

17 Did you form an opinion as to what
18 distance Mr. Brown traveled in that
19 position?

20 A. I have some calculations that may
21 refine what I testified to before. It's
22 104 feet 2 inches from the center line of
23 the manhole to Pole 37. That's a hundred
24 or something before. Going at 24 miles an



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

1 MR. CHARNAS: Did you finish
2 your answer?

3 A. No.

4 Q. And was he --

5 A. But not where the marks -- not
6 where those black marks are on the
7 guardrail. I think he made contact with
8 the top of the guardrail.

9 Q. But just so we're clear, in the
10 last 13 feet before Pole 16/37, it's your
11 opinion that the motorcycle was leaning to
12 the right and that Brown's back was turned
13 towards the guardrail and that he made
14 contact with the guardrail?

15 A. Correct.

16 Q. And it's also your opinion that the
17 motorcycle did not make contact with the
18 guardrail?

19 A. Correct.

20 Q. Do you have any experience
21 designing or engineering lines of utility
22 poles?

23 A. Do I what?

24 Q. Do you have any experience



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110

285

1 designing or engineering lines of utility
2 poles?

3 A. No.

4 Q. Now you've produced to us today a
5 rolled-up diagram marked, "Plan view."
6 And I just want to ask you some questions
7 about this.

8 MR. LEWIN: Can we mark his
9 original or --

10 MR. CHARNAS: That's okay,
11 Murray?

12 THE WITNESS: That's not the
13 original.

14 MR. CHARNAS: Oh.

15 THE WITNESS: I think -- I
16 think that's a --

17 MR. LEWIN: This is a copy?

18 THE WITNESS: Yeah. This
19 is the original here.

20 (Witness indicating)

21 MR. LEWIN: Okay. Well,
22 let's mark this copy.

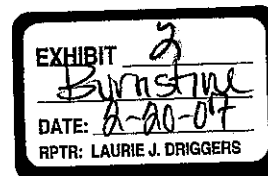
23 (Exhibit-9, Diagram, marked
24 for identification).



Technologies you can use • Experience you can Trust

Direct Dial: 617.557.0039
Toll Free: 866.814.0039
Toll Free Fax: 866.557.0041
www.jackdanielreporting.com

100 Franklin Street
Boston, Massachusetts 02110



MURRAY BURNSTINE P.E.
67 MAPLEWOOD STREET
MALDEN, MASSACHUSETTS 02148
PHONE (781) 321-4435

16 November 2006

Brown v United States, et al., C.A.No 04-11924-RGS

Pre trial report of Murray Burnstine

My first notification and request to investigate the subject incident was through a phone conference with Mr. Scott Charnas on 15 April 2002. I was faxed the Bedford PD report. A preliminary survey of the scene and inspection of the motorcycle was performed on 17 April 2002.

Brown was heading NE on Hartwell Road (the directions are by survey compass and might differ from local terminology). Hartwell road is 33 feet wide. The pavement edges are irregular, the NE lane is 17 feet wide, there are no curbs. My survey began upstream of the collision at pole No. 39 (sta. 0). The road side edge of pole 39 was 7'-6" from the pavement. A beam type guardrail starts just N of pole 39. Pole 38 (sta 61'-7") has a "SPEED LIMIT 25" sign and is 2'-3" inboard of the edge of the pavement and located between the guardrail and the pavement. The road surface was well worn black top and the coefficient of friction was assessed at 0.6. The grade of the road at various locations was recorded in my notes. At station 67'-10" in the northbound lane there was a collapsed sewer manhole. The cast iron cover was 26" in diameter, the zone of collapse surrounding the cover measured 55" in diameter and the depth of the collapse measured 2" below the adjacent pavement. The center of the manhole was 104 feet upstream of pole 37 (the one struck).

Pole 37 (sta 172') near side was 13 inches from the pavement edge. The guardrail was behind the pole. The guardrail ends at sta 260' and the survey ends at pole 36 (sta 279'). The road within the survey zone is in a constant left turn with a centerline radius of 224 feet.

The scene was located using the pole number (37) on the police report. With respect to Browns travel direction: on his right was Hanscom Field and on his left was the former Raytheon Missile Systems complex (180 Hartwell Ave). Several discrepancies were noted on the Bedford PD report: i.e. with respect to the motorcycle travel direction the pole numbers are decreasing (39---36) not increasing as shown in the police sketch and the poles should be shown between the road and the guardrail. There